

Amendments to the Specification

Please replace the paragraph beginning at line 22 on page 17 with the following paragraph.

During operation, water to be treated was introduced into depleting compartments 34 and a flushing fluid, which was typically a concentrate stream, flowed in concentrating compartments 36. A second flushing fluid flowed into compartment 70 and was discharged as reject along with the fluid from concentrating compartments. A separate fluid flowed into compartment ~~70~~72 and commonly collected and eventually was reintroduced into the ~~anode~~cathode compartment 40. The fluid from the ~~anode~~cathode compartment was discharged to drain. Under the influence of an applied electric field, water was split in compartment 72 into hydrogen and hydroxyl ions. Cation-exchange resin 50 in compartment 72 inhibited transport of the positively charged hydrogen ions. Anion-selective membrane 48, forming the boundaries with compartment 72 further inhibited any migration of hydrogen ions from compartment 72. Over time, hydrogen ion concentration increased relative to the hydroxyl ion concentration because the arrangement of electroactive media in compartment 72, consisting essentially of cation-exchange resin and ~~was~~ bounded by anion-selective ~~membrane~~membranes, promoted migration of hydroxyl ions into adjacent compartment 70 while inhibiting hydrogen ion transport.

Please replace the paragraph beginning at line 14 on page 18 with the following paragraph.

The data presented in Tables 1-4 summarize measured properties of the various streams during the operation of electrodeionization device 16. ~~In the~~The last two columns of each table

lists the measured fluid properties of water leaving the ~~anode~~electrode compartment. Specifically, in the next to last column of each table, feed water was introduced into the ~~anode~~cathode compartment and the measured physical properties of the stream leaving that ~~anode~~ compartment are listed. In comparison, in the last column, fluid from compartment 72 was introduced into the ~~anode~~cathode compartment and the properties of the fluid leaving that ~~anode~~ compartment are listed. The data shows that using fluid from compartment 72 wherein hydrogen was collected from water splitting and introduced into the electrode compartment, the measured LSI was lower than the LSI measured without using the fluid from compartment 72. This is significant because an LSI that is close to zero indicates a lesser likelihood of scaling. Thus, the Example shows that the use of the present invention can reduce the likelihood of scaling in an electrodeionization device.